

# **State Trauma Advisory Board 2005 Annual Report**

**Arizona Department of Health Services  
Susan Gerard, Director**

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**This Report Is Provided As Required By A.R.S. § 36-2222(E)(4)**

## **INTRODUCTION**

The State Trauma Advisory Board (STAB), created pursuant to A.R.S. § 36-2222, is an advisory body to the Director of the Arizona Department of Health Services (ADHS). STAB is comprised of health care professionals from hospitals and prehospital agencies, and individuals representing the public who are appointed by the Director. STAB's purpose, as mandated by statute, is to: (1) make recommendations on the initial and long-term processes for the verification and designation of trauma center levels, including the evaluation of trauma center criteria; (2) make recommendations on the development and implementation of comprehensive regional emergency medical services and trauma system plans; (3) make recommendations on the state emergency medical services and trauma system quality improvement processes, including the state trauma registry; and (4) submit a report to the director on or before October 1 of each year regarding the board's accomplishments and recommendations.

Traumatic injury is the leading cause of death for individuals under 44 years of age, and is among the top 10 leading causes of death for all other age groups. An estimated 160,000 deaths occur each year in the United States as a result of traumatic injuries. An organized trauma system as a component of an organized Emergency Medical Services (EMS) system is indispensable in reducing the incidence of death and long-term disability from traumatic injury. Establishing a formal process for state designation of trauma centers is the keystone for developing a more cohesive and effective state EMS and trauma system through which trauma-related morbidity and mortality can be mitigated.

Determining, by way of a standardized criterion-based process, the resources and capabilities of health care institutions that provide trauma services will ensure that health care institutions with the requisite resources and capabilities are appropriately matched with each patient's treatment needs.

Matching the appropriate health care institution with the treatment needs of patients will improve outcomes and will utilize precious healthcare resources in a cost-effective manner.

Arizona has made significant strides over the last year in the development of a formal comprehensive trauma system, which includes the authority for the Department to officially designate eligible health care institutions as Level I, II, III, or IV trauma centers, and thus advance Arizona's trauma system toward a comprehensive model trauma system with Level-specific trauma care availability from the most remote locations to the most densely populated areas of the state.

## **TRAUMA CENTER DESIGNATION**

A.R.S. §§ 36-2225 and 36-2222(E)(1) were created by Laws 2004, Chapter 292, which became effective on August 25, 2004. A.R.S. § 36-2225 was then amended by Laws

2005, Chapter 52, effective April 11, 2005, to include the language regarding a national verification organization and the permissible bases for trauma center designation. Pursuant to A.R.S. § 36-2222(E)(1), STAB is tasked with making recommendations on the initial and long-term processes of the verification and designation of trauma center levels, including the evaluation of trauma center criteria. A.R.S. § 36-2225 mandates, among other things, that the Department develop and administer a statewide EMS and trauma system, implement the Arizona EMS and Trauma System Plan, and adopt rules to establish standards designating and de-designating health care institutions as trauma centers. Since August 2004, the Department worked with STAB and the STAB Verification/Designation Work Group to promulgate rules for the designation and de-designation of trauma centers.

On October 6, 2005, the Governor's Regulatory Review Council approved, with an immediate effective date, the final rulemaking for trauma center designation. The rules, in the new 9 A.A.C. 25, Article 13, provide standards and establish the process for the Department to designate and de-designate health care institutions as Level I, II, III, or IV trauma centers. Trauma center designation represents the Department's formal determination that a health care institution has the resources and capabilities necessary to provide trauma services at a particular Level, and is a trauma center. Designation as a Level I trauma center requires the most resources and capabilities, and designation as a Level IV the least.

Trauma center designation is voluntary; therefore, a health care institution is not prohibited from receiving trauma patients and providing trauma services if it is not a designated trauma center. This is consistent with ADHS's statutory authority because A.R.S. § 36-2225 does not indicate that designation is mandatory and does not prohibit a health care institution from providing trauma services if it is not a designated trauma center.

The Bureau of Emergency Medical Services (BEMS) conducted a survey in July 2005 to determine the level of interest health care institutions had in seeking trauma center designation. Appendix A reflects those health care institutions intending to seek trauma center designation within the next few years. Of the health care institutions surveyed, twenty-five hospitals expressed an interest in applying for trauma center designation over the next two years. Of these 25 hospitals, eight indicated an interest in Level I designation, five indicated an interest in Level II designation, four indicated an interest in Level III, and eight indicated an interest in Level IV designation. A health care institution does not have to be a hospital to obtain Level IV designation.

For several years, seven hospitals have been providing trauma services by operating as "self-designated" Level I trauma centers (Appendix B). The rules provide for a 90-day grace period from the October 6, 2005, effective date for the self-designated Level I trauma centers to submit an application for trauma center designation. The grace period allows these seven trauma centers to obtain state designation without first having to successfully complete a site visit by the American College of Surgeons – Committee on Trauma (ACS). Upon successful submission of an application, a self-designated Level I

trauma center can continue operating as a Level I trauma center for 36 months from October 6, 2005, with the proviso that they will seek ACS's verification or determination that the health care institution meets the state's criteria for designation during the 36-month period. Thereafter, these trauma centers must have applied for and successfully completed an ACS site visit in order to retain state designation.

As of the writing of this report, three of the seven self-designated trauma centers have applied for Level I trauma center designation, two of which (John C. Lincoln – North Mountain and Scottsdale Healthcare – Osborn) have received official designation. John C. Lincoln – North Mountain's designation became effective November 10, 2005, and Scottsdale Healthcare – Osborn became effective November 16, 2005. Flagstaff Medical Center's application has been received and is currently in process. BEMS anticipates the remaining four self-designated trauma centers will submit their applications by the January 4, 2006, grace period deadline.

## **CENTRAL TRAUMA REGISTRY**

Another critical component to development of the formal trauma system is the Arizona Central Trauma Registry. ADHS currently has nine hospitals reporting to the registry (Appendix C) with four new hospitals expected to begin reporting in the next couple of months. The registry, housed under the Office of Health Registries within the Bureau of Public Health Statistics, is undergoing a system-wide standardization project. This includes an update to the data collection format, standardization of the required data elements, and a data element dictionary. This standardization project will include converting trauma data from hospitals using Collector® software to Trauma One® software, and permanently converting these hospitals to using Trauma One® software with the exception of Flagstaff Medical Center, which will continue to use Collector® software. With the implementation of trauma center designation, all designated trauma centers are statutorily mandated to report to the registry.

Upon completion of the standardization project, the trauma registry will provide information to drive public policy, enhance system performance, identify and evaluate system best practices, identify and evaluate gaps, review the utilization of trauma resources, track patient outcomes, develop performance standards, and measure system performance overall.

BEMS provides trauma registry software to the health care institutions participating in the registry. BEMS maintains contracts with the two registry software vendors for support and maintenance of the system on behalf of all participants.

## **ARIZONA TRAUMA SYSTEM QUALITY ASSURANCE AND SYSTEM IMPROVEMENT COMMITTEE**

The Arizona Trauma System Quality Assurance and System Improvement Committee (AZTQ), a subcommittee of the State Trauma Advisory Board, is responsible for: 1) recommending standards for a uniform data collection system for the registry; 2)

maintaining confidentiality of registry data; 3) the use of aggregate data; 4) the release of such trauma data; and 5) developing methods for continual quality enhancement of registry data and the statewide trauma system quality assurance process. AZTQ has been on hiatus for some time, pending the availability of accurate and reliable data from the registry. The committee is scheduled to begin meeting in January 2006. AZTQ is comprised of individuals representing EMS and trauma services throughout the state.

## **DATA COLLECTION**

Another important initiative essential to an effective, comprehensive EMS and trauma system is the prehospital data collection component. There is no mandatory requirement for prehospital agencies to collect and submit prehospital data to BEMS. The State of Arizona is divided into four EMS regions, Northern, Western, Southeastern and Central. All four regions established regional councils several years ago. Together these regional councils form the statutorily mandated emergency medical services coordinating system. The southeastern region has recently instituted an electronic prehospital data collection system. The western region is reviewing the system for application. It is BEMS's hope that all four regions, and all of the EMS providers, institute this system. The trauma legislation that passed during 2004 initially included a requirement for prehospital data collection, but that requirement was deleted before the legislation passed and became law. BEMS continues to work with the regional councils and encourages prehospital data collection in an effort to further the EMS and trauma system. Various grant monies and BEMS monies will be utilized in the coming year to assist EMS agencies with initiating prehospital data collection, with the stipulation that BEMS has access to the data.

## **STATEWIDE EMS AND TRAUMA SYSTEM ASSESSMENT**

BEMS has prepared the 2005 annual comprehensive statewide assessment to obtain an objective determination of the statewide capabilities, structure, and needs of the Arizona EMS and Trauma System and its providers. This project has been a collaborative effort with representatives from the four EMS regional councils. BEMS will compile and analyze the data to determine statewide system gaps, resources, and needs.

## **CONCLUSION**

The State Trauma Advisory Board and BEMS continue to make progress in building the foundation for a comprehensive trauma system. Continued support from and collaboration with ADHS, the Legislature, and stakeholders in the health care community are essential to moving forward to achieve the overarching goal of reducing mortality and morbidity of the trauma patient.

**Health Care Institutions Responding to a Bureau of EMS Survey to Determine Probable Participation in the Arizona Trauma System as State Designated Trauma Centers**

Health Care Institution	Probable Participation		Designation Level Being Considered				Year Seeking Designation
	Yes	No	I	II	III	IV	
Banner Desert Medical Center	X		X				2007 – 2008
Banner Good Samaritan Medical Center	X		X				?
John C. Lincoln Hospital – North Mtn.	X		X				?
Phoenix Children’s Hospital	X		X				?
Maricopa Medical Center	X		X				Dec. 2006
St. Joseph’s Hospital & Medical Center	X		X				ASAP
Scottsdale Healthcare – Osborn	X		X				Oct. 2005
University Medical Center	X		X				Dec. 2007
Banner Thunderbird Medical Center	X			X			?
Chandler Regional Medical Center	X			X			?
Del E. Webb Memorial Hospital	X			X			?
Flagstaff Medical Center	X			X			June 2007
Mercy Gilbert	X			X			Summer 2006
Chinle Comprehensive Healthcare Facility					X		?
Mayo Clinic (Scottsdale)	X				X		?
Sierra Vista Regional Health Center	X				X		April 2006
Yuma Regional Medical Center	X				X		?
Benson Hospital	X					X	April 2006
Boswell Hospital	X					X	?
Kingman Regional Medical Center	X					X	?
Midwest Express Care		X				X	?
Mount Graham Regional Medical	X					X	Next 2 years
Scottsdale Healthcare – Shea	X					X	Oct. 2007
Tempe Saint Luke’s	X					X	?
Winslow Memorial Hospital	X					X	?

Appendix A  
As of 8/31/05

## **"SELF-DESIGNATED" LEVEL I TRAUMA CENTERS**

John C. Lincoln - North Mountain  
250 East Dunlap Avenue  
Phoenix, AZ 85020

Banner Good Samaritan Medical Center  
925 East McDowell Road  
Phoenix, AZ 85006

St. Joseph's Hospital and Medical Center (ACS Verified)  
350 West Thomas Road  
Phoenix, AZ 85013

Scottsdale Healthcare (Osborn)  
7400 E. Osborn  
Scottsdale, AZ 85251

Flagstaff Medical Center  
1200 N. Beaver Street  
Flagstaff, AZ 86001

Maricopa Medical Center  
2601 E. Roosevelt  
Phoenix, AZ 85008

University Medical Center  
1501 N. Campbell Avenue  
Tucson, AZ 85724

Appendix B

## **HOSPITALS CURRENTLY REPORTING TO TRAUMA REGISTRY**

John C. Lincoln - North Mountain  
Phoenix, AZ 85020

Banner Good Samaritan Medical Center  
Phoenix, AZ 85006

St. Joseph's Hospital and Medical Center (ACS Verified)  
Phoenix, AZ 85013

Scottsdale Healthcare (Osborn)  
Scottsdale, AZ 85251

Flagstaff Medical Center  
Flagstaff, AZ 86001

Maricopa Medical Center  
Phoenix, AZ 85008

University Medical Center  
Tucson, AZ 85724

Yavapai Regional Medical Center  
Prescott, AZ

Yuma Regional Medical Center  
Yuma, AZ